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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/801,528	03/17/2004	Satoru Kikuchi	04033	2303
23338	7590	05/25/2005	EXAMINER	
DENNISON, SCHULTZ, DOUGHERTY & MACDONALD 1727 KING STREET SUITE 105 ALEXANDRIA, VA 22314			PYO, KEVIN K	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No. 10/801,528	Applicant(s) KIKUCHI ET AL.	
	Examiner Kevin Pyo	Art Unit 2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kazufumi et al (4,523,102).

Regarding claim 1, Kazufumi et al shows in Figs.5, 7, 9 and 15 the following elements of applicant's invention: a) substrate (101); b) a light sensitive element (102) mounted on the substrate; c) an encapsulation resin (col.8, lines 36-49; 114) encapsulating the light sensitive element; and d) a filter layer (104, 117) mounted on at least a surface of the encapsulation resin wherein the filter layer has a filtering effect corresponding to spectral responsivity of the light sensitive element (Fig.15).

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Uchida et al (4,827,117).

Regarding claim 1, Uchida et al shows in Fig.10 the following elements of applicant's invention: a) substrate (31); b) a light sensitive element (38) mounted on the substrate; c) an encapsulation resin (69) encapsulating the light sensitive element; and d) a filter layer (60) mounted on at least a surface of the encapsulation resin wherein the filter layer has a filtering effect corresponding to spectral responsivity of the light sensitive element (col.8, lines 41-57).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kazufumi et al.

Regarding claims 2 and 3, Kazufumi et al differs from the claimed invention in that it does not specifically mention the use of a multilayer filter. However, the use of a multilayer filter is well known in the art in view of providing a high spectral sensitivity characteristic and it would have been obvious to one of ordinary skill in the art to utilize a multilayer filter in Kazufumi et al in view of providing a high spectral sensitivity characteristic. The specific type of a filter utilized, depending on the desired performance and design requirements, would have been an obvious design choice within the skill of a person of ordinary skill in the art depending on the needs of the particular application.

Regarding claim 4, Kazufumi et al differs from the claimed invention in that the wafer (101) and the filter substrate (103) were cut into individual sections before the filter (104) is mounted on the image sensor (102). However, it would have been obvious to one of ordinary skill in the art to place the filter substrate (103) onto the wafer (101) before cutting since it would eliminate an additional cutting step, and thereby simplify the manufacturing steps.

Art Unit: 2878

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchida et al.

Regarding claims 2 and 3, Uchida et al differs from the claimed invention in that it does not specifically mention the use of a multilayer filter. However, the use of a multilayer filter is well known in the art in view of providing a high spectral sensitivity characteristic and it would have been obvious to one of ordinary skill in the art to utilize a multilayer filter in Uchida et al in view of providing a high spectral sensitivity characteristic. The specific type of a filter utilized, depending on the desired performance and design requirements, would have been an obvious design choice within the skill of a person of ordinary skill in the art depending on the needs of the particular application.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Pyo whose telephone number is (571) 272-2445. The examiner can normally be reached on Mon-Fri (with flexible hour), First Mon. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2878

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin Pyo
Primary Examiner
Art Unit 2878

Pkk
5/22/05